

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1. (Previously Presented) A virtual image display apparatus comprising a real image display part for displaying an image, an image magnifying means for optically magnifying the image displayed in the real image display part so as to form a virtual image, and a light guide means for guiding light from the real image display part to the image magnifying means,

said light guide means being formed in a triangular columnar shape having a substantially isosceles triangular cross-section, and having: (1) a first surface serving as a light incident surface, a light emanating surface, and a reflective surface, (2) a second surface serving as a first internal reflecting surface, and (3) a third surface serving as a second internal reflecting surface, wherein:

emanating light from the real image display part is incident upon and enters the light guide means through the first surface,

the entering light is successively internally reflected by: (1) the first internal reflecting surface, (2) the reflective surface of the first surface, and (3) the second internal reflecting surface, and

the successively reflected light emanates from the light guide means through the emanating surface of the first surface and enters into the image magnifying means.

2. (Previously Presented) A virtual image display apparatus comprising a real image display part for displaying an image, an image magnifying means for optically magnifying the image displayed in the real image display part so as to form a virtual image, and a light guide means for guiding light from the real image display part to the image magnifying means,

the light guide means being formed in a quadrate columnar shape having a substantially parallelogram sectional shape and having: (1) both a first internal reflecting surface and a fourth internal reflecting surface for reflecting light into the light guide means, (2) a second internal reflecting surface serving as both a light incident surface and a reflecting surface, and (3) a third internal reflecting surface serving as both a light emanating surface and a reflecting surface, wherein:

emanating light from the real image display part is incident upon the light guide means through the second internal reflecting surface,

the incident light is successively reflected at the first internal reflecting surface, the second internal reflecting

surface, the third internal reflecting surface, and the fourth internal reflecting surface, and

the successively reflected light emanates from the third internal reflecting surface and enters into the image magnifying means.

3. (Original) A virtual image display apparatus as set forth in claim 1 or 2, wherein an optical distance between the real image display part and the image magnifying means is changed.

4. (Original) A virtual image displaying apparatus as set forth in claim 1 or 2, wherein an optical distance between the real image display part and the image magnifying means is changed, and the image magnifying means can be tilted with respect to the emanating light axis of the light guide means.

5. (Original) A virtual image displaying apparatus as set forth in claim 1 or 2, wherein there is provided a light shielding means for covering at least a part of the real image display part.

6. (Original) A virtual image displaying apparatus as set forth in claim 1 or 2, wherein there is provided a heat shielding means for covering at least a part of the real image display part.

7. (Previously Presented) An electronic equipment comprising:

a transducing means for transducing at least one of a data signal and a voice signal into a transmission signal or transducing a receiving signal into at least one of a data signal and a voice signal,

an antenna for transmitting the transmission signal and receiving the receiving signal,

a speaker for transducing the received voice signal transduced by the transducing means into voice,

a microphone for transducing an audio voice signal into the transmission voice signal, and

a virtual image display apparatus as set forth in claim 1 or 2.

8. (Previously Presented) An electronic equipment comprising:

a transducing means for transducing at least either one of a data signal and a voice signal into a transmission signal or transducing a received signal into at least one of a data signal and a voice signal,

an antenna for transmitting the transmission signal or receiving the received signal,

a speaker for transducing the received voice signal transduced by the transducing means into a voice audio signal,

a microphone for transducing an audio voice signal into the transmission voice signal,

the virtual image display apparatus of claim 1 or 2 for displaying the received data signal transduced by the transducing means,

a control means for controlling several elements including one or more of the transducing means, the speaker, the virtual image display apparatus, and the microphone, and

a display means different from the virtual image display apparatus.

Claims 9-13 (Cancelled).

14. (Previously Presented) A virtual image display apparatus comprising a real image display part for displaying an

image, an image magnifying means for optically magnifying the image displayed in the real image display part so as to form a virtual image, and a light guide means for guiding light from the real image display part to the image magnifying means,

said light guide means being formed in a triangular columnar shape having a substantially isosceles triangular cross-section, and having: (1) a first surface serving as a light incident surface, a light emanating surface, and a reflective surface, (2) a second surface serving as a first internal reflecting surface, and (3) a third surface serving as a second internal reflecting surface, wherein:

emanating light from the real image display part is incident upon and enters the light guide means through the first surface,

the entering light is successively internally reflected by: (1) the first internal reflecting surface, (2) the reflective surface of the first surface, and (3) the second internal reflecting surface,

the successively reflected light emanates from the light guide means through the light emanating surface of the first surface and enters into the image magnifying means,

a spatial operating distance is less than about 100 mm, and

an optical path length extending from the center of the real image display part to an eye point is larger than a value which

is three times as large as the thickness of the light guide means.

15. (Previously Presented) A virtual image display apparatus comprising a real image display part for displaying an image, an image magnifying means for optically magnifying the image displayed in the real image display part so as to form a virtual image, and a light guide means for guiding light from the real image display part to the image magnifying means,

the light guide means being formed in a quadrate columnar shape having a substantially parallelogram sectional shape and having: (1) both a first internal reflecting surface and a fourth internal reflecting surface for reflecting light into the light guide means, (2) a second internal reflecting surface serving as both a light incident surface and a reflecting surface, and (3) a third internal reflecting surface serving as both a light emanating surface and a reflecting surface, wherein:

emanating light from the real image display part is incident upon and enters the light guide means through the second internal reflecting surface,

the entering light is successively reflected at the first internal reflecting surface, the second internal reflecting

surface, the third internal reflecting surface, and the fourth internal reflecting surface,

the successively reflected light emanates from the third internal reflecting surface into the image magnifying means,

a spatial operating distance is less than about 100 mm, and

an optical path length extending from the center of the real image display part to an eye point is larger than a value which is three times as large as the thickness of the light guide means.

16. (Previously Presented) A virtual image display apparatus comprising a real image display part for displaying an image, an image magnifying means for optically magnifying the image displayed in the real image display part so as to form a virtual image, and a light guide means for guiding light from the real image display part to the image magnifying means,

said light guide means comprising a first prism, a second prism and a second image magnifying means interposed between the first prism and the second prism,

said first prism being formed in a triangular columnar shape having a right triangle cross section and having: (1) a long side used as a first internal reflecting surface, (2) a short side



used as an emanating surface, and (3) a slope side used as both an incident surface and a second internal reflecting surface,

said second prism being formed in a triangular columnar shape having: (1) a long side used as a fourth internal reflecting surface, (2) a short side used as an incident surface, and (3) a slope side used as both an emanating surface and a third internal reflecting surface,

emanating light from the real image display part is incident upon and enters the incident surface of the first prism,

the light entering the first prism is successively reflected at the first internal reflecting surface and the second internal reflecting surface,

the successively reflected light within the first prism emanates from the emanating surface of the first prism,

the light emanating from the first prism is incident upon and enters the second prism by way of the second image magnifying means,

the light entering the second prism is successively reflected at the third internal reflecting surface and the fourth internal reflecting surface, and

the successively reflected light within the second prism emanates from the emanating surface of the second prism and enters into the image magnifying means.

17. (Previously Presented) A virtual image display apparatus as set forth in claim 15 or 16, wherein:

said fourth internal reflecting surface forms a half mirror, a correction prism formed in a right triangle-like columnar shape is provided outside of the fourth internal reflecting surface, and

a light shielding means, is provided to the correction prism, for controlling light transmitting through the half mirror so as to be transmitted and blocked.

18. (Previously Presented) A virtual image display apparatus as set forth in any one of claims 14 to 16, wherein an optical distance between the real image display part and the image magnifying means is variable.

19. (Previously Presented) A virtual image display apparatus as set forth in any one of claims 14 to 16, wherein:

an optical distance between the real image display part and the image magnifying means is variable, and

the optical axis of the image magnifying means is tiltable with respect to the emanating optical axis of the light guide means.

20. (Previously Presented) A virtual image display apparatus as set forth in any one of claims 14 to 16, wherein there is provided a light shielding means for covering at least a part of the real image display part.

21. (Previously Presented) A virtual display apparatus as set forth in any one of claims 14 to 16, wherein there is provided a heat shielding means for covering at least a part of the real image display part.

22. (Previously Presented) A virtual image display apparatus as set forth in claim 14, wherein said first surface is formed as a total reflection surface based upon the Snell's law.

23. (Original) A virtual image display apparatus as set forth in claim 15 or 16 wherein the second internal reflecting surface and the third internal reflecting surface are formed as total reflecting surfaces based upon the Snell's law.

24. (Previously Presented) A virtual image display apparatus as set forth in any one of claims 14 to 16, wherein said image magnifying means is an optical member provided adjacent to the surface from which the light emanates from the

light guide means in a noncontact manner and has a positive refractive power.

25. (Cancelled).

26. (Previously Presented) A virtual image display apparatus as set forth in any one of claims 14 to 16, wherein a space is defined between the real image display part and the light guide means.

27. (Cancelled).

28. (Previously Presented) A virtual image display apparatus as set forth in any one of claims 14 to 16, wherein a light shielding means is provided a part of the surface of the light guide means.

29. (Previously Presented) A virtual image display apparatus as set forth in claim any one of claims 14 to 16, wherein there is provided a support member for supporting the light guide means and the support member has a light absorbing ability.

Claims 30 and 31 (Cancelled).

32. (Previously Presented) An electronic equipment comprising:

a transducing means for transducing at least one of a data signal and a voice signal into a transmission signal or transducing a receiving signal into at least one of a data signal and a voice signal,

an antenna for transmitting the transmission signal and receiving the receiving signal,

a speaker for transducing the received voice signal transduced by the transducing means into an audio voice signal,

a microphone for transducing an audio voice signal into the transmission voice signal,

a virtual image display apparatus as set forth in any one of claims 14 to 16, and

a control means for controlling one or more of the transducing means, the antenna, the speaker, the microphone, and the virtual image display apparatus.

33. (Previously Presented) An electronic equipment comprising:

a transducing means for transducing at least either one of a data signal and a voice signal into a transmission signal or transducing a received signal into at least one of a data signal and a voice signal,

an antenna for transmitting the transmission signal or receiving the received signal,

a speaker for transducing the received voice signal transduced by the transducing means into a voice audio signal,

a microphone for transducing an audio voice signal into the transmission voice signal,

the virtual image display apparatus of any one of claims 14 to 16 for displaying the received data signal transduced by the transducing means,

a control means for controlling several elements including one or more of the transducing means, the speaker, the virtual image display apparatus, and the microphone, and

a display means different from the virtual image display apparatus.

Claims 34-38 (Cancelled).

39. (Previously Presented) A virtual image display apparatus as set forth in claim 1, wherein the emanating light

from the real image display part is incident upon and enters the light guide means through the first surface and is internally reflected by the first internal reflecting surface, then by the reflective surface of the first surface and finally by the second internal reflecting surface, and thereafter, the entering light emanates from the light guide means through the first surface and is incident upon the image magnifying means.

40. (Previously Presented) A virtual image display apparatus as set forth in claim 14, wherein the emanating light from the real image display part is incident upon and enters the light guide means through the first surface and is internally reflected by the first internal reflecting surface, then by the reflective surface of the first surface and finally by the second internal reflecting surface, and thereafter, the entering light emanates from the light guide means through the first surface and is incident upon the image magnifying means.